DOCUMENT RESUME

ED 419 235 CS 216 329

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TITLE Factors Influencing Grant Writing of K-12 Teachers.
PUB DATE 1998-03-00
NOTE 18p.; Paper presented at the Annual Meeting of the Louisiana Education Research Association (Shreveport, LA, March 5-6, 1998).
PUB TYPE Reports - Evaluative (142) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Elementary Secondary Education; *Financial Support; *Grants; *Grantsmanship; Program Proposals; *Proposal Writing; Questionnaires; *Teacher Attitudes; Teacher Motivation; Teacher Surveys
IDENTIFIERS *Grant Recipients; Louisiana

ABSTRACT

A study examined whether number of years of teaching, number of grant proposals written, and level of funding received were distinguished among K-12 teachers in relationship to factors perceived as motivating grant writing; obstacles encountered in grant writing; and needed support for continued grant writing. Questionnaires were mailed to 121 teachers in northwest Louisiana who submitted grants to a statewide competitive grant funding program. Of these 121 teachers, 89 completed and returned the questionnaires, producing a 74% response rate. Teachers were categorized into groups by years of teaching, number of grants written, and funding level achieved. Results indicated: (1) on the motivating factor variable "Recognition from the School District," teachers receiving between $0 and $1000 in previous funding needed assistance in locating funding sources, grant budgeting, and technical assistance, and teachers receiving between $1000 and $5000 needed increased recognition to continue grant writing; (2) on the obstacle variables "Knowledge of Funding Opportunities," "Lack of Budgeting Knowledge," "Lack of Technical Assistance" distinguished between groups of teachers, with teachers receiving between $0 and $1000 in previous funding perceiving these as greater obstacles. On the needed support variable "Management Difficulties," teachers having had the greatest amount of funding perceived this as a greater obstacle than teachers having a smaller dollar amount of grants funded. Findings suggest a significant positive correlation between number of grants written and level of funding. (Contains eight tables of data and 11 references; a sample teacher questionnaire form is appended.) (Author/CR)

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ED 419 235

Running Head: Factors Influencing Grant Writing

Factors Influencing Grant Writing of K-12 Teachers

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Paper Presented at:
Louisiana Education Research Association
Annual Meeting, March 5-6, 1998
Shreveport, Louisiana

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Abstract

The purpose of this research was to ascertain whether number of years of teaching, number of grant proposals written, and level of funding received were distinguished among K-12 teachers in relationship to factors perceived as motivating grant writing, obstacles encountered in grant writing and needed support for continued grant writing. Questionnaires were mailed to 121 teachers in northwest Louisiana that submitted grants to a statewide competitive grant funding program. Of these 121 teachers, 89 completed and returned questionnaires, producing a 74% response rate. Teachers were categorized into groups by years of teaching, number of grants written and funding level achieved. When the motivating factor variables, obstacle variables and needed support variables were analyzed using level of funding achieved in previous grants as the independent variable, significant differences were found among groups. On the motivating factor variable *Recognition from the School District*, differences were found between teachers receiving between $0 and $1000 in previous funding and teachers receiving between $1000 and $5000. The obstacle variables *Knowledge of Funding Opportunities, Lack of Budgeting Knowledge, Lack of Technical Assistance* distinguished between groups of teachers, with teachers receiving between $0 and $1000 in previous funding perceiving these as greater obstacles. On the needed support variable *Management Difficulties*, teachers having had the greatest amount of grant funding perceived this as a greater obstacle than teachers having a smaller dollar amount of grants funded. Finally a significant positive correlation was found between number of grants written and level of funding.

Introduction

Grant writing in elementary and secondary schools is becoming a popular means by which schools can obtain much needed materials, supplies, technology, and even professional development. As more and more teachers become successful in obtaining dollars for their classrooms, administrators are viewing grant writing as a means to improving school programs without incurring additional expenses to their often meager budgets. Administrators are beginning to encourage and sometimes even expect teachers to participate in grant writing activities. These expectations, many times, are created for teachers without providing the training and support teachers need to be successful.

Much of the published literature on grant development for K-12 teachers focuses on the process of grant writing. Gloeckner (1993), Moe (1995), and Moursund (1995) give advice on types of proposals, effective communication, needs assessment techniques, locating funding sources, and the importance of persistence in grant writing. Howard (1996), Novelli (1994), and Reissman (1995) discuss how to begin a grant, components of a winning proposal, how to communicate with funding agencies and how to evaluate a grant project. Frost and Wardle (1995) outline aspects of government grant funding for technology, discuss funding allocation, explain how schools are using grant funding, and describe ways to meet staff development needs.

Research is limited, however, on other aspects of grant related activities at the elementary and secondary level. There is little research on the tangible and intangible factors motivating teachers to engage in grant writing activities. There is also little work on some of the barriers that prevent teachers from pursuing grant opportunities.

Monahan (1992) found that teachers many times feel uneasy and ill prepared in writing and submitting grant proposals. In a survey of 108 elementary and secondary teachers, fewer than 1% reported that they "often" engaged in grant writing activities. Ten percent reported that they "sometimes," 23% reported that they"rarely," and the remaining 47% reported that they "never" engaged in grant seeking or grant writing activities. Teachers reported that a general lack of knowledge of grantsmanship, their teaching responsibilities, and lack of administrative encouragement were the primary obstacles to their involvement in grant writing.

Brown and Schenck (1993) found that as teacher grant funding increased, additional administrative support was needed. They documented a need to train staff and administrators as proposal writers. They also found a need to develop a district grant writing procedure to optimize district planning while meeting funding obligations and controlling hidden cost. Reducing teaching loads to offset additional work incurred through grant funding was also found to be a much needed step for schools developing an effective grant funding program.

While research abounds on the mechanics of grant writing, there is little research on characteristics of teachers engaged in grant writing and the professional development that is needed to support successful grant writing experiences. The purpose of this study was to survey teachers involved in grant writing in order to determine factors that motivate teachers to write grants, obstacles that teachers face in writing and managing grants as well as staff development that may be needed that will support teachers in continued grant writing. This study also examined if there were any differences in motivating factors, obstacles and needed staff development for different types of teachers.

Study Methodology

Questionnaires were mailed to 121 teachers in northwest Louisiana who had submitted grants to a statewide competitive grant funding program. These teachers were competing for $500, $750 or $1000 grants in the areas of mathematics and science. Of these 121 teachers, 89 completed and returned questionnaires, producing a 74% response rate.

The questionnaire was developed to identify factors that motivated teachers to write grants, obstacles encountered by teachers as they wrote their grants and continued staff development needed by teachers for future grant writing. Monahan's (1992) study of teachers and grant writing along with a review of research literature served as the basis for the development of the questionnaire.

Motivating factors identified in the questionnaire included: improved student performance, acquiring badly needed equipment, personal satisfaction in having a grant funded, developing a professional reputation as a successful grant writer, recognition from the school district, and a reduced teacher workload. Obstacle variables identified in the questionnaire included: lack of funding knowledge, lack of budgeting knowledge, lack of encouragement from the school district, lack of technical assistance, problems with the school district's business office and increased workload. Questions were also included to determine the need for continued staff development for teachers continuing to write grants. These questions included if funding needed to be identified by central office administration, support of grant writing from school principal, need for future staff development and support needed to address grant management difficulties.

Descriptive analysis of the questionnaire was conducted to determine general tendencies of all teachers for motivating factor variables, obstacle variables and needed staff development variables. Teachers were also categorized into independent variable groups by years of teaching, number of grants written and funding level achieved in previous grant writing. The independent variables were compared to the dependent motivating factor variables, obstacle variables and needed staff support variables using a One-Way Analysis of Variance. A correlation was also conducted between independent variables to determine if any significant correlation existed between years of teaching, number of grants written and funding level achieved with previous grants.

Results

Of the teachers surveyed 78% had received funding in a previous grant. This was a surprising result since only 22% of the teachers surveyed would receive funding in this particular grant program. In this group of grant writing teachers, it was apparent that teachers writing the majority of grants had succeeded in getting some funding for their classrooms.

Teachers surveyed indicated improved student learning was a major motivating factor with 94% of teachers identifying this as a strong motivator for grant writing. Providing resources for badly needed equipment was identified as a strong motivator for grant writing by 91% of teachers. Satisfaction in obtaining funding was identified as an average or strong motivator by 67% of teachers. Gaining recognition from the school district was not found to be a motivating factor with 26% identifying this variable as a strong or average motivator (Table 1).

The greatest obstacle encountered by teachers surveyed was a lack of knowledge of grant funding sources. Lack of funding knowledge was identified as either an extreme, great or average obstacle by 79% of teachers. Lack of technical assistance in writing grants was found to be an extreme to average obstacle by 56% of teachers. Lack of encouragement was not found to be an obstacle by the teachers surveyed with 81% identifying this variable as a low to no obstacle (Table 2). This was a surprising finding in that Monahan (1992) in his study of teachers found this as a major obstacle.

The staff development received prior to grant writing was indicated as being adequate or greater than adequate by 76% teachers surveyed. Teachers believed however, that continued staff development was important with 99% of teachers saying it was needed, extremely needed, or essential for continued grant writing (Table 3).

Differences in motivating factor variables, obstacle variables and staff development variables for different groups of teachers were examined in this study. Teachers were grouped by years of teaching, number of grants written and funding level achieved in previous grants. These groups were identified as independent variables and then annualized for differences between groups for dependent motivating factor variables, obstacle variables and staff development variables using a One-Way Analysis Of Variance. Funding level achieved in past grant writing proved to be the best indicator of differences between groups with the dependent variables analyzed.

The motivating factor variable *Recognition from the School District* produced a significant difference for teachers receiving between $0 and $1000 in previous funding and teachers

receiving between $1000 and $5000 in previous funding with teachers receiving more funding perceiving this as a greater motivator ($p < .05$)(Table 4 and Table 5).

The obstacle variables *Knowledge of Funding Opportunities, Lack of Budgeting Knowledge, and Lack of Technical Assistance* in writing grants showed significant differences between groups of teachers. Teachers receiving funding between $0 and $1000 perceived these as greater obstacles than teachers having received greater than $5000 in previous funding ($p < .05$)(Table 4,Table 5 and Table 6).

Only one needed support variable showed significant differences between groups of teachers. Teachers having had greater amounts of previous grant funding, between $1000 and $5000 and greater than $5000, perceived *Management Difficulties* in conducting their grants as a greater obstacle than teachers having less than $1000 in previous funding ($p < .05$)(Table 4 and Table 8).

A two-tailed t-test was conducted to determine if significant relationships existed between variables. A significant positive correlation was found between number of grants written and level of previous grants funded across all groups of teachers($p < .01$).

Conclusions and Implications

Teachers are expected to write grants to achieve the funding necessary to provide students with the equipment and materials needed to facilitate learning. Staff development must focus on the specific needs of these teachers in order to maximize the success of these endeavors. Teachers that are successful tend to continue to be involved in grant writing, creating a substantial funding source for schools.

This study found that there were factors that motivated teachers to write grants. As expected, teachers tend to become involved in activities that will benefit the children they teach. The strongest motivating factors found were those linked to improved student achievement or which provided students with needed equipment and materials to facilitate and maximize learning.

Differences between groups of teachers were also found in the study with level of previous funding being the independent variable that most distinguished between groups of teachers. Teachers beginning to write grants and teachers with low previous funding levels, less than $1000, need assistance in locating funding sources, grant budgeting and technical assistance in writing and managing grants. Teachers having received a medium range of previous funding, $1000 to $5000, need increased recognition to continue grant writing. Teachers with large amounts of previous funding, greater than $5000, indicated that difficulties in managing their grants once funding was obtained as a major obstacle.

All teachers indicated grant writing staff development was needed for continued grant writing. Staff development that is aimed at the specific needs of the teachers may result in improved funding for teachers as well as eliminating obstacles faced by teachers in their grant writing activities.

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Appendices

Table 1. Motivating Factors for Grant Writing

	Strong Motivator	Average Motivator	No Motivator
Improved Student Learning	94%	6%	0%
Resources for Needed Equipment	91%	7%	2%
Satisfaction in Obtaining Funding	44%	23%	33%
Gaining Recognition from the School District	7%	19%	74%

Table 2. Obstacles for Grant Writing

	Great/Extreme Obstacle	Medium/Average Obstacle	Low/No Obstacle
Lack of Funding Knowledge	37%	42%	21%
Lack of Technical Assistance	22%	34%	44%
Lack of Encouragement	7%	12%	81%

Table 3. Grant Writing Support Needed by Teachers.

	Inadequate	Adequate	Greater than Adequate
Staff Development Received for Grant Writing	24%	30%	46%
	Not Helpful	Helpful/Extremely Helpful	Essential
Continued Support for Grant Writing	1%	51%	48%

Table 4. Table of Means.

Groups	Motivating Variable District Recognition		Obstacle Variable Funding Knowledge*		Obstacle Variable Knowledge of Budgeting		Obstacle Variable Lack of Technical Assistance		Obstacle Variable Management Difficulties	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Teacher having received funding of $0 to $1000	2.16	.485	3.33	1.11	2.67	1.17	3.16	1.23	2.16	2.22
Teachers having received funding of $1000 to $5000	2.55	.828	3.21	1.01	2.17	.966	2.59	1.05	3.86	1.27
Teachers having received funding of greater than $5000	2.18	.529	2.59	1.28	1.82	.951	2.00	.791	3.41	1.62

*Significant differences found using Duncan Multiple Range Test. All other significant differences found using the ANOVA.

Table 5. One-way Analysis of Variance between groups receiving different levels of previous grant funding and the motivating factor variable *Recognition from School District*. Significant differences were found between teachers receiving between $0 and $1000 previous funding and teachers receiving between $1000 and $5000 previous funding.

Source	df	Sum of Squares	Mean Squares	F Ratio
Between Groups	2	2.90	.451	3.72
Within Groups	86	33.5	.390	
Total	88	36.4		

* $p < .05$

Table 6. One-way Analysis of Variance between groups receiving different levels of previous grant funding and the obstacle variable *Lack of Budgeting Knowledge*. Significant differences were found between teachers receiving between $0 and $1000 previous funding and teachers receiving greater than $5000 previous funding.

Source	df	Sum of Squares	Mean Squares	F Ratio
Between Groups	2	10.2	.076	4.45
Within Groups	86	98.1	.140	
Total	88	108.2		

* $p < .05$

Table 7. One-way Analysis of Variance between groups receiving different levels of previous grant funding and the obstacle variable *Lack of Technical Assistance*. Significant differences were found between teachers receiving between $0 and $1000 previous funding and teachers receiving greater than $5000 previous funding.

Source	df	Sum of Squares	Mean Squares	F Ratio
Between Groups	2	17.7	8.83	7.24
Within Groups	86	104.9	1.22	
Total	88	122.6		

* $p < .01$

Table 8. One-way Analysis of Variance between groups receiving different levels of previous grant funding and the obstacle variable *Management Difficulties*. Significant differences were found between teachers receiving between $0 and $1000 previous funding and teachers receiving between $1000 and $5000 previous funding. Significant differences were also found between teachers receiving between $0 and $1000 previous funding and teachers receiving greater than $5000 previous funding.

Source	df	Sum of Squares	Mean Squares	F Ratio
Between Groups	2	54.4	27.2	7.92
Within Groups	86	295.4	3.44	
Total	88	349.8		

* $p < .01$

Teacher Questionnaire

Check the appropriate blank

Employment Status:

___ Partime teacher
___ Fulltime teacher between one year experience and less than one year
___ Fulltime teacher between 2 - 5 years experience
___ Fulltime teacher between 6-10 years experience
___ Fulltime teacher with greater than 10 years experience

Frequency of Grant Writing: How many grants have you submitted for funding?

___ 1 grant ___ 2-4 grants
___ 5-9 grants ___ 10-12

Funding Level: How many total dollars have your grants received?

___ Unfunded ___ $5,000 to 10,000 ___ $40,000 to 60,000
___ $500 to 1,000 ___ $10,000 to 20,000 ___ $60,000 to 100,000
___ $1,000 to 5,000 ___ $20,000 to 40,000 ___ greater than $100,000

Write the appropriate number in the blank next to the statement
****Make Sure to address each statement, each blank should have a number****
Motivating Factors to writing a grant
4-strong motivator, 3-average motivator, 2-not a motivator, 1-does not apply to my school district

___ Making a contribution to improved student learning
___ Having the resources to acquire badly needed equipment
___ Satisfaction in obtaining grant funding
___ Building a personal professional reputation as a successful grant writer
___ Gaining recognition from the school district and/or school administration
___ Reduced teacher load to work on a successful grant

Obstacles to grant writing
5-an extreme obstacle, one that may prevent future grant writing activities 4-great obstacle 3-medium obstacle 2-low obstacle 1-not an obstacle

___ Lack of knowledge of funding opportunities
___ Lack of knowledge of budgeting and account management
___ Lack of encouragement from school administration
___ Lack of technical assistance on how to write competitive proposals
___ How to deal with school district's business office
___ Increased work load to the extent that you would not write another grant

Needed Support (write the appropriate number in the blank next to the statement)

___ How often do support personnel in the central office identify available funding sources?
5-Very Frequently 4-Frequently 3-Occasionally 2-Rarely 1-Never

___ How often does your principal identify available funding sources?
5-Very Frequently 4-Frequently 3-Occasionally 2-Rarely 1-Never

____ Please select the following statement that best describes the quantity of staff development you received prior to writing your grant.
5-very adequate, I received enough training to comfortably write my grant
4-adequate, I received training but would have been interested in more training to increase my comfort level in writing my grant
3-less than adequate, training in grant writing was not sufficient to meet my needs, more training would have improved my grant writing experience
2-inadequate, very little training was provided causing a high degree of difficulty in writing my grant
1-no training was provided for teacher grant writing

____ Rate the difficulty of managing a grant through your school district once funding was obtained.
5-very easy 4-easy 3-somewhat difficult 2-very difficult
1-so difficult as to prevent future grant writing 0-Does not apply

___ How helpful would support for grant writing and grant management be to continued grant writing?
4-Essential for continued grant writing 3-Very Helpful 2-Helpful
1-Not helpful, or needed for grant writing

Please make any comments on your grant writing experience.

_____

_____

_____

_____

_____